

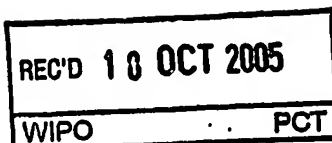
PATENT COOPERATION TREATY


PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



| | | | | |
|---|--|---|--|----------------------|
| Applicant's or agent's file reference 200309832-2 | | FOR FURTHER ACTION | | See Form PCT/PEA/416 |
| International application No. PCT/EP2004/051371 | | International filing date (day/month/year) 06.07.2004 | Priority date (day/month/year) 25.07.2003 | |
| International Patent Classification (IPC) or national classification and IPC H04L29/08, H04L29/14 | | | | |
| Applicant HEWLETT-PACKARD DEVELOPMENT COMPANY L.P. | | | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | | | |
| Date of submission of the demand 24.05.2005 | | Date of completion of this report 18.10.2005 | | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | | Authorized Officer Mannekens, J Telephone No. +31 70 340- | | |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/051371

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-13 as originally filed

Claims, Numbers

1-36 as originally filed

Drawings, Sheets

1/4-4/4 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/051371

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | |
| | No: Claims | 1-36 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-36 |
| Industrial applicability (IA) | Yes: Claims | 1-36 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: EP-A-1 309 142 (HEWLETT PACKARD CO) 7 May 2003 (2003-05-07)
D2: CHANDRANMENON G P ET AL: 'TRADING PACKET HEADERS FOR PACKET PROCESSING' IEEE / ACM TRANSACTIONS ON NETWORKING, IEEE INC. NEW YORK, US, vol. 4, no. 2, 1 April 1996 (1996-04-01), pages 141-152, XP000582666 ISSN: 1063-6692
D3: HARRY SINGH: 'Distributed Fault-Tolerant/High-Availability Systems' TRILLIUM, [Online] 12 December 2001 (2001-12-12), pages 1-22, XP002266230 Retrieved from the Internet:
<URL:http://web.archive.org/web/20011212024354/http://www.trillium.com/news-events/w_hite-papers/index.html>
[retrieved on 2004-01-07]

2. The term "context information" used throughout the claims is vague and unclear and leaves the reader in doubt as to the meaning of the technical feature to which it refers, thereby rendering the definition of the subject-matter of said claims unclear (Article 6 PCT). Especially in the context of message-flow through the layers of a protocol stack, the successive added header-portions can be seen as context information. It is for example well-known in the art to append direct or indirect request-id, flow-id, task-id references in headers while passing through the protocol stack.
3. Taking the objection of paragraph 2 into account, the present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of independent claims 1, 11, 18, 28, 35, 36 is not new in the sense of Article 33(2) PCT.
 1. claim 1: Document D1, which is considered to represent the most relevant state of the art, discloses the use of fault tolerant network element in the context of voice over IP (D1, paragraph 2) using a protocol stack, having at least one layer (D1, Figure 3). Considering the objection of paragraph 2, it

appears that obtaining context information in a layer of the protocol stack and adding the obtained context information to the outgoing message such that a response message contains the context information, covers standard protocol stack functionality. Therefore, the subject-matter of claim 1 is not novel.

2. claim 11: The subject-matter of claim 11 corresponds with the subject-matter of claim 1 but defined for receiving a response message. Therefore the reasoning in paragraph 3.1 is also valid for claim 11.
 3. claim 18: The subject-matter of claim 18 corresponds with the subject-matter of claim 1, but defined in system features. Therefore claim 18 is also considered not to be novel.
 4. claim 28: The subject-matter of claim 28 corresponds with the subject-matter of claim 11, but defined in system features. Therefore claim 28 is also considered not to be novel.
 5. claim 35: The subject-matter of claim 35 corresponds with the subject-matter of claim 1. Therefore claim 35 is also considered not to be novel.
 6. claim 36: The subject-matter of claim 36 corresponds with the subject-matter of claim 11. Therefore claim 36 is also considered not to be novel.
4. The additional subject-matter of dependent claims 2-6 is covered by the reasoning for claim 1. Therefore, dependent claims 2-6 are also not new in the sense of Article 33(1) and (2) PCT.
 5. When interpreting the term "context information" in a more narrow sense, not taking paragraph 2 into account, the present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of independent claims 1, 11, 18, 28, 35, 36 does not involve an inventive step in the sense of Article 33(3) PCT. The reasoning in detail is only done for independent claim 1.
 1. Document D1, which is still considered to represent the most relevant state of the art, from which the subject-matter of claim 1 differs in that storing context information obtained for a layer of the protocol stack is added to the

outgoing message such that a response to the message contains the context information.

The problem to be solved by the present invention may therefore be regarded as how can a protocol stack layer receiving a response message behave within the context where the outgoing message was sent out.

Document D2 discloses, in order to reduce data processing, the addition of a separate data manipulation header in an easy accessible portion of the outgoing packet (D2, page 1, col 2, line 43 - page 2, col 1, line 10) allowing compilation of information from several protocol layers, providing the same advantages as in the present application. The skilled person would therefore regard it as a normal design option to include this feature in a protocol stack in order to solve the problem posed.

Thus, the subject-matter of claim 1 does not involve an inventive step and does not satisfy the criterion set forth in Articles 33(1) and 33(3) PCT.

6. Dependent claims 7-10, 12-17, 19-27, 29-34 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty and/or inventive step, the reasons being as follows:
 1. The additional subject-matter of claims 7-9 relates to a SIP environment. It is however generally known to the person skilled in the art that the SIP is an equivalent to H.323 as the VoIP protocol of document D1 and can be interchanged with that feature where circumstances make it desirable. Document D3 for example discloses in Figure 2 on page 8, H.323 and SIP together in the context of high-availability next-gen systems.
 2. In claim 10 a slight constructional change in the context information of claim 1 is suggested which comes within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of claim 10 also appears to lack an inventive step.
 3. claims 12-17: The subject-matter of claims 12-17 corresponds with the subject-matter in dependent claims 2-10. Therefore, the subject-matter of

claims 12-17 also appears to lack an inventive step.

4. claims 19-27: The subject-matter of claims 19-27 corresponds with the subject-matter in dependent claims 2-10, but defined in system features. Therefore, the subject-matter of claims 19-27 also appears to lack an inventive step.
5. claims 29-34: The subject-matter of claims 29-34 corresponds with the subject-matter in dependent claims 12-17, but defined in system features. Therefore, the subject-matter of claims 29-34 also appears to lack an inventive step.
7. The application does not meet the requirements of Article 6 PCT, because claims 1, 11, 18, 28, 35, 36 are not clear.
 1. It is clear from the description on page 2, lines 5-9, 19-20 and on page 7, lines 8-10 that the following feature is essential to the definition of the invention:

(1) The absence of a common storage area for storing context data in a high-availability configuration

Since none of the independent claims 1, 11, 18, 28, 35, 36 does contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rules 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

2. Although claims 1 and 35 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
3. A similar objection as in paragraph 7.2 is applicable on claims 11 and 36.

Jan Mannekens

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/EP2004/051371
